LNP™ THERMOCOMP™ Compound DC004E

PC-CF20 — Saudi Basic Industries Corporation (SABIC)

Product Texts

LNP THERMOCOMP DC004E compound is based on Polycarbonate (PC) resin containing 20% carbon fiber. Added features of this grade include: Easy Molding, Electrically Conductive.

Mechanical properties	Value	Unit	Test Standard
ISO Data			
Tensile Modulus	**12200**	MPa	ISO 527
Stress at break	**165**	MPa	ISO 527
Strain at break	**2.1**	%	ISO 527
Flexural modulus	**11900**	MPa	ISO 178
Izod impact strength, +23°C, 4mm	**40**	kJ/m²	ISO 180/1U
Izod notched impact strength, +23°C, 4mm	**8**	kJ/m²	ISO 180/1A

Thermal properties	Value	Unit	Test Standard
ISO Data			
Temp. of deflection under load, 1.80 MPa	**136**	°C	ISO 75-1/-2
Temp. of deflection under load, 0.45 MPa	**141**	°C	ISO 75-1/-2
Coeff. of linear therm. expansion, parallel	**9**	E-6/K	ISO 11359-1/-2
Coeff. of linear therm. expansion, normal	**65**	E-6/K	ISO 11359-1/-2

Electrical properties	Value	Unit	Test Standard
ASTM Data			
Surface Resistivity	**1000**	Ohm	ASTM D 257

Other properties	Value	Unit	Test Standard
Density	**1270**	kg/m³	ISO 1183

Processing Recommendation Injection Molding	Value	Unit	Test Standard
Pre-drying - Temperature	**120**	°C	-
Pre-drying - Time	**4**	h	-
Processing humidity	**≤0.02**	%	-
Melt temperature	**305 - 325**	°C	-
Mold temperature	**80 - 110**	°C	-
Zone 1	**295 - 305**	°C	-
Zone 2	**310 - 320**	°C	-
Zone 3	**320 - 330**	°C	-
Screw speed	**30 - 60**	rpm	-
Back pressure	**0.2 - 0.3**	MPa	-

Characteristics

Processing

Injection Molding

Regional Availability

North America, Europe, Asia Pacific

Special Characteristics

Increased electrical conductivity